

5288

**SCS ENGINEERS**

July 18, 2008  
File No. 02199312.01

Mr. Johnny Beal  
Facility Manager  
Wake County  
PO Box 550  
Raleigh, North Carolina 27609



Subject: Landfill Gas Monitoring Results – July 15, 2008  
North Wake Landfill – Wake County, North Carolina

Dear Johnny:

SCS Engineers, PC (SCS) is pleased to submit the results of the Monthly Landfill Gas (LFG) Monitoring Event, performed at the North Wake County Landfill on July 15, 2008. This monitoring was performed in accordance with the updated Landfill Gas Remediation Plan, dated 7/12/07. Correspondence serving as notification of the methane exceedance detected at LFG monitoring probe M-26 was submitted to NCDENR on 1/3/08. Monitoring probe M-26 regained compliant status during the June monthly monitoring event.

SCS used a GEM-500 Infrared Gas Analyzer to measure subsurface concentrations of methane, carbon dioxide, oxygen, balance gas, and pressure at probe M-26, which previously exhibited methane levels in excess of the regulatory limit. The monitoring results are presented in Exhibit 1.

As presented on Exhibit 1, the methane concentration in probe M-26 was greater than the regulatory limit of 5 percent methane. This is an increase compared to the previous month and is most likely attributed to the reduced vacuum being applied to the two new perimeter migration control wells, R-8 and R-9, which are located adjacent to monitoring probe M-26. SCS adjusted the wellhead control valves to increase the applied vacuum to LFG extraction wells R-8 and R-9. We recommend the County contact WGP to confirm that sufficient vacuum is maintained.

SCS will continue to conduct monitoring at probe M-26 on a monthly basis until it demonstrates measurements below the compliance threshold for three consecutive months as stipulated in the updated LFG Remediation Plan. SCS will continue to coordinate with Wake County and WGP to monitor the active LFG perimeter migration control system performance and evaluate the impact on subsurface methane levels at the perimeter LFG monitoring probes.



EXHIBIT 1. LANDFILL GAS MONITORING PROBES  
NORTH WAKE LANDFILL - WAKE COUNTY, NORTH CAROLINA

Date: July 15, 2008  
Project No: 02199312.01  
Weather: Sunny, 90°F

Personnel: DBK  
Equipment: GEM-2000

Monitoring Probe No.	Time (24-hr)	Methane (% vol)	Carbon Dioxide (% vol)	Oxygen (% vol)	Balance Gas (% vol)	Pressure (in-wc)
M 26	12:15	12.2	18.6	3.7	65.1	0.0
Extraction Well No.	Initial Pressure (in-wc)	Adjusted Pressure (in-wc)				
R 8	0.0	-0.28				
R 9	0.0	-0.1				

Notes: